

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

YOON, Jee Hong

Hannuri Bldg. 219 Naeja-dong, Chongno-gu, Seoul 110-053
Republic of Korea

PCT

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) **23 NOVEMBER 2004 (23.11.2004)**

Applicant's or agent's file reference
FE241511

FOR FURTHER ACTION
See paragraph 2 below

International application No.

PCT/KR2004/002469

International filing date (day/month/year)

24 SEPTEMBER 2004 (24.09.2004)

Priority date(day/month/year)

30 SEPTEMBER 2003 (30.09.2003)

International Patent Classification (IPC) or both national classification and IPC

IPC7 H04B 7/26

Applicant

UTStarcom Korea Limited et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.
For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR



Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon 302-701,
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

NAM, Ki Young

Telephone No. 82-42-481-5710



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/002469

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/002469

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1 - 2	YES
	Claims	none	NO
Inventive step (IS)	Claims	none	YES
	Claims	1 - 2	NO
Industrial applicability (IA)	Claims	1 - 2	YES
	Claims	none	NO

2. Citations and explanations :

Reference is made to the following documents.

D1: WO 01/61884 A1 (QUALCOMM INCORPORATED) 23 AUGUST 2001

D2: WO 01/37443 A1 (SAMSUNG ELECTRONICS CO., LTD.) 25 MAY 2001

1. Novelty (PCT Article 33(2))

This invention as defined in the claims is to a method of implementing different algorithms according to the service type to be provided through a CDMA-2000 system. That is, if the service type is a voice service, the conventional reverse-link power control algorithm that is used for an IS-95A or IS-95B CDMA system is employed at a Base Station Subsystem (BTS). However, if the service type is a data service, a target Energy per Bit/Noise Total (Eb/Nt) value for each of a reverse fundamental channel and a reverse supplemental channel is determined based on the statuses of the frames received in the reverse channels.

This invention includes the step of selecting a service type-data service type or voice service type- to be provided.

But, D1 and D2 do not disclose this step above.

So this invention meets the criteria set out in PCT Article 33(2).

2. Inventive step (PCT Article 33(3))

D1 reveals a method for controlling the power of transmitting on a number of channels(e.g., two-fundamental and supplemental channel) to a particular remote terminal. For example, for the cdma2000 system, a fundamental channel may be assigned for voice and certain types of data, and one or more supplemental channels may be assigned for high-speed data.

D2 reveals a method of transmitting frames (power control bits) on at least two traffic channels, that is, a first traffic channel (fundamental channel for voice) frame and a second traffic channel (supplemental channel for high-speed data) frame to a receiver and the receiver reports a reception result back to the transmitter.

Neither of these citations individually discloses all of the features of the claims, when combined as would be obvious to a person skilled in the art, those citations disclose all of the features of the claims above.

3. Industrial applicability (PCT Article 33(4))

Claims 1 through 2 are considered to be industrially applicable.